Notice of Rulemaking Hearing
Department of Environment and Conservation
Division of Radiological Health

There will be a hearing before the Tennessee Department of Environment and Conservation to consider the promulgation of amendments pursuant to T.C.A. 68-202-101 et seq. and 68-202-201 et seq. The hearing will be conducted in the manner prescribed by the Uniform Administrative Procedures Act, Tennessee Code Annotated, Section 4-5-204 and will take place in the 17th Floor Conference Room of the L & C Tower located at 401 Church Street, Nashville, Tennessee, at 10:00 a.m. (CST), on the 28th day of April 2004.

Individuals with disabilities who wish to participate in these proceedings or to review these filings should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such participation. Such contact may be made in person, by writing, telephone or other means and should be made no less than ten (10) days prior to April 28, 2004, or ten (10) days prior to the date such party intends to review such filings, to allow time for the Department to determine how it may reasonably provide such aids or services. Contact the Tennessee Department of Environment and Conservation, John White, ADA Coordinator, L C Annex, Seventh Floor, 401 Church Street, Nashville, TN 37243; (615) 532-0207. Hearing impaired callers may use the Tennessee Relay Service (1-800-848-0298).

Amendments

Paragraph (64) of Rule 1200-2-5-.32 Definitions is amended by adding the words " of the whole body" before the word "or" and adding the words " the skin of" after the word "or", so that as amended the paragraph shall read:

(41) *Shallow–dose equivalent* (H_s), which applies to the external exposure of the skin of the whole body or the skin of an extremity, is taken as the dose equivalent at a tissue depth of 0.007 centimeter (7 mg/cm^2) averaged over an area of 1 square centimeter.

Authority: T.C.A. §§4–5–201 et seq., 68–202–203 and 68–202–206.

Paragraph (3) and subparagraphs (1)(a) and (b) of Rule 1200-2-5-.50 Occupational Dose Limits for Adults is amended by deleting the paragraph and subparagraphs and substituting the following, so that as amended the paragraph and subparagraphs shall read:

(1) (a) An annual limit that is the lesser of:

1. A total effective dose equivalent of 5 rems (0.05 Sv) or

2. The sum of the deep–dose equivalent and the committed dose equivalent to any individual organ or tissue other then the lens of the eye equal to 50 rems (0.5 Sv).

(b) The annual limits to the lens of the eye, to the skin of the whole body and to the skin of the extremities:

1. A lens–dose equivalent to 15 rems (0.15 Sv), and

2. A shallow–dose equivalent of 50 rems (0.50 Sv) to the skin of the whole body or to the skin of any extremity.

(3) The assigned deep–dose equivalent shall be for the part of the body receiving the highest exposure. The assigned shallow–dose equivalent shall be the dose averaged over the contiguous 10 cm^2 of skin receiving the highest exposure. Deep–dose, lens–dose and

shallow–dose equivalents may be assessed from surveys or other radiation measurements to demonstrate compliance with occupational dose limits. However, this may be done only if the individual monitoring device was not subject to the highest potential exposure, or the individual monitoring results are unavailable.

Authority: T.C.A. §§4–5–201 et seq., 68–202–203 and 68–202–206.

Rule 1200-2-10-.08 Types of Licenses is amended by deleting the rule and substituting the following, so that as amended the rule shall read:

(1) Licenses for radioactive materials are of two types:

(a) General licenses provided for in this chapter are effective without the filing of applications with the Division or the issuance of licensing documents to particular persons; however, the Division will require reporting of devices covered by the particular general license in accordance with 1200-2-10-.10(2)(c)13.

(b) Specific licenses are issued to named persons upon applications filed pursuant to this chapter.

(2) Reserved.

Authority: T.C.A. 68-202-101 et seq.

Paragraph (2) of Rule 1200-2-10-.10 General Licenses [1] – Radioactive Material Other than Source Material is amended by deleting the paragraph and substituting the following, so that as amended the paragraph shall read:

(2) Certain detecting, measuring, gauging or controlling devices and certain devices for producing light or an ionized atmosphere. [1]

(a) A general license is hereby issued to commercial and industrial firms and research, educational and medical institutions, individuals in the conduct of their business and State or local government agencies to own, acquire, receive, possess, use or transfer, in accordance with the provisions of (b), (c) and (d) of this paragraph, radioactive material contained in devices designed and manufactured for the purpose of detecting, measuring, gauging or controlling thickness, density, level, interface location, radiation, leakage, or qualitative or quantitative chemical composition, or for producing light or an ionized atmosphere.

(b) 1. The general license in subparagraph (a) applies only to radioactive material contained in devices that have been manufactured or initially transferred and labeled in accordance with the specifications contained in:

(i) A specific license issued by the Division pursuant to 1200–2–10–.13(4) or

(ii) The specifications contained in a specific license issued by the U.S. Nuclear Regulatory Commission, an Agreement State or a Licensing State that authorizes distribution of devices to persons generally licensed by the U.S. Nuclear Regulatory Commission, an Agreement State or a Licensing State.

2. The devices shall have been received from one of the above licensees or through a transfer made under part (2)(c)9.

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[1] *Persons possessing radioactive material in devices under the general license in 1200–2–10–.10(2) before October 2, 1978, may continue to possess, use or transfer that material in accordance with the requirements in the 1972 edition of the regulations.*

(c) Persons who own, acquire, receive possess, use or transfer radioactive material in a device pursuant to the general license contained in subparagraph (2)(a):

1. Shall assure that all labels affixed to the device at the time of receipt and bearing the statement that removal of the label is prohibited are maintained thereon and shall comply with all instructions and precautions provided by such labels;

2. Shall assure that the device is tested for leakage of radioactive material and proper operation of the on–off mechanism and indicator, if any, at no longer than six–month intervals or at such other intervals as are specified in the label; however,

   (i) Devices containing only krypton need not be tested for leakage of radioactive material, and

   (ii) Devices containing only tritium or not more than 100 microcuries of other beta and/or gamma emitting material or 10 microcuries of alpha emitting material and devices held in storage in the original shipping container prior to initial installation need not be tested for any purpose;

3. Shall assure that the tests required by part (2)(c)2. and other testing, installation, servicing and removal from installation involving the radioactive material, its shielding or containment, are performed:

   (i) In accordance with the instructions provided by the labels, or

   (ii) By a person holding an applicable specific license issued by the Division, the U.S. Nuclear Regulatory Commission, an Agreement State or a Licensing State to perform such activities.

4. Shall maintain records showing compliance with the requirements of parts (2)(c)2. and (c)3. The records shall show the results of tests. The records also shall show the dates of performance of and the names of persons performing testing, installation, servicing and removal from installation of the radioactive material, its shielding or containment. The licensee shall retain these records as follows:

   (i) Each record of a test for leakage or radioactive material required by part (2)(c)2. shall be retained for three (3) years after the next required leak test is performed or until the sealed source is transferred or disposed of.

   (ii) Each record of a test of the on–off mechanism and indicator required by part (2)(c)2. shall be retained for three (3) years after the next required test of the on–off mechanism and indicator is performed or until the sealed source is transferred or disposed of.

   (ii) Each record that is required by part (2)(b)3. shall be retained for three (3) years from the date of the recorded event or until the sealed source is transferred or disposed of.

5. Shall immediately suspend operation of the device if there is a failure of or damage to, or any indication of a possible failure of or damage to, the shielding of the radioactive material or the on–off mechanism or indicator, or upon the detection of 0.005 microcurie (185 becquerel) or more removable radioactive material. The device may not be operated until it has been repaired by the manufacturer or other person holding an applicable specific license issued by the Division, the U.S. Nuclear Regulatory Commission, an Agreement State or a Licensing State to repair such devices. The device and any radioactive material from the device may only be disposed of by transfer to a person holding an applicable specific license to receive the radioactive material contained in the device or as otherwise approved by the Division. The licensee shall within 30 days furnish to the Division at the address in Rule 1200–2–4–.07 a report

containing a brief description of the event and the remedial action taken. In the case of detection of 0.005 microcurie or more removable radioactive material or failure of or damage to a source likely to result in contamination of the premises or the environs, the licensee shall within 30 days submit to the Division at the address in 1200–2–4–.07 a plan for ensuring that the premises and environs are acceptable for unrestricted use. Under these circumstances, the criteria set out in paragraph 1200–2–10–.36(2), "Radiological criteria for unrestricted use," may be applicable, as determined by the Division on a case–by–case basis.

6. Shall not abandon the device containing radioactive material;

7. Shall not export the device containing radioactive material except in accordance with 10 CFR 110.

8. Shall:

   (i) Transfer or dispose of the device containing radioactive material only by export as provided by part (2)(c)7., by transfer to another general licensee as authorized in part (c)9. of this paragraph, or to a person authorized to receive the device by a specific license issued by the Division under this chapter or an equivalent license issued by the U.S. Nuclear Regulatory Commission or an Agreement State, or as otherwise approved under subpart (2)(c)8.(iii) below.

   (ii) Shall within 30 days after the transfer of a device to a specific licensee or export furnish a report to the Division. The report shall contain:

      (I) The identification of the device by manufacturer's (or initial transferor's) name, model number and serial number;

      (II) The name, address and license number of the person receiving the device (license number not applicable is exported); and

      (III) The date of the transfer.

   (iii) Shall obtain written Division approval before transferring the device to any other specific licensee not specifically identified in subpart (2)(c)8.(i).

9. Shall transfer the device to another general licensee only if:

   (i) The device remains in use at a particular location. In this case, the transferor shall give the transferee a copy of this paragraph (2) and any safety documents identified in the label of the device. Within 30 days of the transfer, the transferor shall report to the Division:

      (I) The manufacturer’s (or initial transferor's) name;

      (II) The model number and the serial number of the device transferred;

      (III) The transferee's name and mailing address for the location of use; and

      (IV) The name, title and phone number of the responsible individual identified by the transferee in accordance with part (2)(c)12. to have knowledge of and authority to take actions to ensure compliance with the appropriate regulations and requirements; or

   (ii) The device is held in storage by an intermediate person in the original shipping container at its intended location of use prior to initial use by a general licensee;

10. Shall comply with the provisions of 1200–2–5–.140 and 1200–2–5–.141 for reporting radiation incidents, theft or loss of radioactive material.

11. Shall respond to written requests from the Division to provide information relating to the general license within 30 calendar days of the date of the request, or other time specified in the request. If the general licensee cannot provide the requested information within the allotted time, it shall, within that same time period, request a longer period to supply the information by submitting a letter to the Division at the address in Rule 1200–2–4–.07 providing written justification as to why it cannot comply.

12. Shall appoint an individual responsible for having knowledge of the appropriate regulations and requirements and the authority for taking required actions to comply with appropriate regulations and requirements. The general licensee, through this individual, shall ensure the day–to–day compliance with appropriate regulations and requirements. This appointment does not relieve the general licensee of any of its responsibility in this regard.

13. Shall:

    (i) Report these devices to the Division. Reporting shall be done by verifying, correcting and/or adding to the information provided in a request for a report received from the Division. The report information shall be submitted to the Division within 30 days of the date of the request or as otherwise indicated in the request.

    (iii) In reporting devices, furnish the following information and any other information specifically requested by the Division:

        (I) Name and mailing address of the general licensee.

        (II) Information about each device: the manufacturer (or initial transferor), model number, serial number, the radioisotope and activity (as indicated on the label).

        (III) Name, title and telephone number of the responsible person designated as a representative of the general licensee under part (b)12.

        (IV) Address or location at which the device(s) are used and/or stored. For portable devices, the address of the primary place of storage. Each address for a location of use represents a separate general license.

        (V) Certification by the responsible representative of the general licensee that the information concerning the device(s) has been verified through a physical inventory and checking of label information.

        (VI) Certification by the responsible representative of the general licensee that they are aware of the requirements of the general license.

14. Shall be subject to the bankruptcy notification requirement in paragraph 1200–2–10–.16(7) if holding devices containing radioactive material that meet the following criteria, based on the activity indicated on the label:

    (i) At least 10 mCi (370MBq) of cesium–137,

    (ii) At least 0.1 mCi (3.7 MBq) of strontium–90,

    (iii) At least 1 mCi (37 MBq) of cobalt–60, or

    (iv) At least 1 mCi (37 MBq) of americium–241 or any other transuranic (i.e., element with atomic number greater than uranium (92))

15. Shall report changes to the mailing address for the location of use (including change in name of general licensee) to the Division, at the address in 1200–2–4–.07, within 30 days of the effective date of the change. For a portable device, a report of address change is only required for a change in the device's primary place of storage.

16. Shall not hold devices that are not in use for longer than two (2) years. If devices with shutters are not being used, the shutter shall be locked in the closed position. The testing required by part (b)2. need not be performed during the period of storage only. However, when devices are put back into service or transferred to another person and have not been tested within the required test interval, they shall be tested for leakage before use or transfer and the shutter tested before use. Devices kept in standby for future use are excluded from the two–year time limit if the general licensee performs quarterly physical inventories of these devices while they are in storage.

(d) The general license provided in this paragraph is subject to the provisions of 1200–2–10–.16(1), (2) and (3), 1200–2–10–.23(1), (2) and (3), 1200–2–10–.26 through 1200–2–10–.28 and 1200–2–10–.30.

(e) The general license in 1200–2–10–.10(2)(a) does not authorize the manufacture of devices containing radioactive material.

Authority: T.C.A. 68-202-101 et seq.

Paragraph (5) of Rule 1200-2-10-.13 Special Requirements for Issuance of Specific Licenses is amended by deleting the paragraph and substituting the following, so that as amended the paragraph shall read:

(5) Manufacture, distribution or initial distribution of devices to persons generally licensed under 1200–2–10–.10(2). In addition to the requirements set forth in 1200–2–10–.12, a specific license to distribute certain devices of the types enumerated in 1200–2–10–.10(2) to persons generally licensed under 1200–2–10–.10(2) or equivalent regulations of the U.S. Nuclear Regulatory Commission, an Agreement State or a Licensing State will be issued only if:

(a) The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control, labels, proposed uses, installation, servicing, leak testing, operating and safety instructions, and potential hazards of the device to provide assurance that:

1. The device can be safely operated by persons not having training in radiological protection;

2. Under ordinary conditions of handling, storage and use of the device, the radioactive material contained in the device will not be released or inadvertently removed from the device, and no person will receive in one year a dose in excess of ten percent (10%) of the limits specified in 1200–2–5–.50; and

3. Under accident conditions (such as fire and explosion) associated with handling, storage and use of the device, it is unlikely that any person would receive an external radiation dose or dose commitment in excess of the dose to the appropriate organ as specified in Table RHS 7–1;

TABLE RHS 7–1 TABLE OF ORGAN DOSES

Part of Body	rem	mSv / Sv
Whole body; head and trunk; active blood forming organs; gonads; or lens of eye	15	150 mSv

Hands and forearms; feet and ankles; localized areas of skin averaged over areas no larger than 1 square centimeter	200	2 Sv
Other organs	50	500 mSv

(b) Each device bears a durable, legible clearly visible label or labels approved by the Division that contain(s) in a clearly identified and separate statement:

1. Instructions and precautions for safe installation, operation and servicing of the device (documents such as operating and service manuals may be identified in the label and used to provide this information);

2. The requirements, or lack of requirement, for leak testing, or for testing any on–off mechanism and indicator, including the maximum time interval for such testing, and the identification of the radioactive material by isotope, quantity of radioactivity and date of determination of the quantity; and

3. The information called for in one of the following statements in the same or similar form:

(i) The receipt, possession, use, and transfer of this device, Model _____,[7] Serial No. _____,[2] are subject to a general license or the equivalent and the regulations of the U.S. Nuclear Regulatory Commission or of a State with which the NRC has entered into an agreement for the exercise of regulatory authority. This label shall be maintained on the device in a legible condition. Removal of this label is prohibited.

CAUTION – RADIOACTIVE MATERIAL

_____

(Name of manufacturer or distributor)

(ii) The receipt, possession, use and transfer of this device Model _____,[7] Serial No. _____,[7] are subject to a general license or the equivalent and the regulations of a Licensing State. This label shall be maintained on the device in a legible condition. Removal of this label is prohibited.

CAUTION – RADIOACTIVE MATERIAL

_____

(Name of manufacturer or distributor)

(c) Each device having a separable source housing that provides the primary shielding for the source also bears, on the source housing, a durable label containing the device model number and serial number, the isotope and quantity, the words "CAUTION – RADIOACTIVE MATERIAL," and, if practicable, the radiation symbol described in 1200–2–5–.110 and the name of the manufacturer or initial distributor.

(d) Each device meeting the criteria of 10 CFR 31.5(c)(13)(i) bears a permanent (e.g., embossed, etched, stamped, or engraved) label affixed to the source housing if

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[2] *If specified elsewhere in labeling affixed to the device, the model, serial number and manufacturer or distributor may be omitted from this label.*

separable, or the device if the source housing is not separable, that includes the words, "CAUTION – RADIOACTIVE MATERIAL," and, if practicable, the radiation symbol described in 1200–2–5–.110.

(e) In the event the applicant desires that the device be tested at intervals longer than six (6) months, either for proper operation of the on–off mechanism and indicator, if any, or for leakage of radioactive material, or for both, he shall include in his application information to demonstrate that such longer interval is justified by performance characteristics of the device or similar devices, and by design features that have a significant bearing on the probability or consequences of leakage of radioactive material or failure of the on–off mechanism indicator. In determining the acceptable interval for the test for leakage of radioactive material, the Division will consider information that includes, but is not limited to:

1. Primary containment (source capsule);
2. Protection of primary containment;
3. Method of sealing containment;
4. Containment construction materials;
5. Form of contained radioactive material;
6. Maximum temperature withstood during prototype tests;
7. Maximum pressure withstood during prototype tests;
8. Maximum quantity of contained radioactive material;
9. Radiotoxicity of contained radioactive material; and
10. Operating experience with identical devices or similarly designed and constructed devices;

(f) In the event the applicant desires that the general licensee under 1200–2–10–.10(2) or under equivalent regulations of the U.S. Nuclear Regulatory Commission, an Agreement State or a Licensing State, be authorized to install the device, collect the sample to be analyzed by a specific licensee for leakage of radioactive material, service the device, test the on–off mechanism and indicator, or remove the device from installation, he shall include in his application written instructions to be followed by the general licensee, estimated calendar quarter doses associated with such activity or activities and the basis for such estimates. The submitted information shall demonstrate that performance of such activity or activities by an individual untrained in radiological protection, in addition to other handling, storage and use of devices under the general license, will not cause that individual to receive in one year a dose in excess of ten percent (10%) of the limits specified in 1200–2–5–.50;

(g) Before radioactive material may be transferred in a device for use under a general license, each person licensed under 1200–2–10–.13(5) shall furnish the following information to each person to whom he directly or through an intermediate person transfers radioactive material in a device. In the case of a transfer through an intermediate person, the information shall be provided to the intended user and to the intermediate person prior to initial transfer to the intermediate person.

For use under the general license contained in 1200–2–10–.10(2)	For use under equivalent regulations of the U.S. Nuclear Regulatory Commission or an Agreement State or a Licensing State

1.	A copy of the general license contained in 1200–2–10–.10(2). If parts 1200–2–10–.10(2)(c)2. through 4. or 1200–2–10–.10(2)(c)13. do not apply to the particular device, those parts may be omitted;	A copy of the general license contained in the U.S. Nuclear Regulatory Commission's, Agreement State's, or Licensing State's regulations equivalent to 1200–2–10–.10(2). Alternatively, he may furnish a copy of the general license contained in 1200–2–10–.10(2). If a copy of the general license in 1200–2–10–.10(2) is furnished to such a person, it shall be accompanied by a note explaining that the use of the device is regulated by the U.S. Nuclear Regulatory Commission, Agreement State or Licensing State under requirements substantially the same as those in 1200–2–10–.10(2); If paragraphs (c)(2) through (4) or (c)(13), or sections of the Agreement State or Licensing State regulations equivalent to these paragraphs, do not apply to the particular device, these paragraphs may be omitted.
2.	A copy of 1200–2–10–.26, 1200–2–5–.140 and 1200–2–5–.141	A copy of 10 CFR §§31.2, 30.51, 20.2201, and 20.2202 or the Agreement State or Licensing State regulations equivalent to these NRC regulations
3.	A list of services that may only be performed by a specific licensee;	
4.	Information on acceptable disposal options including estimated costs of disposal;	
5.	A statement that regulatory agencies may issue citations and civil penalties for improper disposal;	
6.	The name or title, address, and phone number of the person at the appropriate regulatory agency from whom additional information may be obtained;	

(h) An alternative approach to informing customers may be proposed by the licensee for approval by the Division.

(i) Each device that is transferred after [insert date 1 year after effective date of this rule] shall meet the labeling requirements in subparagraphs 1200–2–10–.13(5)(b), (c) and (d).

(j) Each person licensed under 1200–2–10–.13(5) to distribute devices to generally licensed persons shall:

1. Report to the Division, at its offices located at the address in Rule 1200–2–4–.07, all transfers of such devices to persons for use under the general license in 1200–2–10–.10(2).

2. Report to the U.S. Nuclear Regulatory Commission all transfers of such devices to persons for use under the U.S. Nuclear Regulatory Commission general license in Section 31.5 of 10 CFR Part 31.

3. Report to the responsible Agreement or Licensing State agency all transfers of devices manufactured and distributed pursuant to 1200–2–10–.13(5) for use under a general license in that state's regulations equivalent to 12010–.10(2).

4. Reports required by parts (2)(j)1., 2., and 3. shall identify:

   (i) Each general licensee by name and mailing address for the location of use; if there is no mailing address for the location of use, an alternate address for the general licensee shall be submitted along with information on the actual location of use;

   (ii) The name, title and phone number of the person identified by the general licensee as having knowledge of and authority to take required actions to ensure compliance with the appropriate regulations and requirements;

   (iii) The date of transfer;

   (iv) The type, model number and serial number of the device transferred; and

   (v) The quantity and type of radioactive material contained in the device.

5. If one or more intermediate persons will temporarily possess the device at the intended place of use prior to its possession by the user, the report shall include the same information for both the intended user and each intermediate person, and clearly designate the intermediate person(s).

6. For devices received from a general licensee, the report shall include the identity of the general licensee by name and address, the type, model number and serial number of the device received, the date of receipt, and, in the case of devices not initially transferred by the reporting licensee, the name of the manufacturer or initial transferor.

7. If the licensee makes changes to a device possessed by a general licensee, such that the label must be changed to update required information, the report shall identify the general licensee, the device, and the changes to information on the device label.

8. The report shall cover each calendar quarter, shall be filed within 30 days of the end of the calendar quarter, and shall clearly indicate the period covered by the report.

9. The report shall clearly identify the specific licensee submitting the report and include the license number of the specific licensee.

10. If no transfers have been made to or from persons generally licensed under 1200–2–10–.10(2) during the reporting period, the report shall so indicate.

11. Keep records showing the name, address of use, and responsible individual for each general licensee to whom he directly or through an intermediate person transfers radioactive material in devices for use pursuant to the general license provided in 1200–2–10–.10(2) or equivalent regulations of the U.S. Nuclear Regulatory Commission, an Agreement State or a Licensing State. The records shall show the date of each transfer, the model number, serial number and the isotope and quantity of radioactivity in each device transferred, the identity of any intermediate person(s), and compliance with the report requirements of this subparagraph. The records required by this part (5)(j)11. shall be maintained for a period of three (3) years from the date of the recorded event.

Authority: T.C.A. §68–202–101 et seq.

Paragraph (7) of Rule 1200-2-10-.16 Specific Terms and Conditions of Licenses is amended by deleting the paragraph and substituting the following, so that as amended the paragraph shall read:

(7) Each specific licensee and each general licensee meeting the criteria of part 1200-2-10-.10(2)(c)14

Authority: T.C.A. 68-202-101 et seq., 68-202-206 and 4-5-202.

Rule 1200-2-10-.17 Expiration and Termination of Licenses is amended by deleting the rule and rule title and substituting the following, so that as amended the rule and rule title shall read:

1200–2–10–.17 Expiration and Termination of Licenses and Decommissioning of Sites and Separate Buildings or Outdoor Areas.

(1) Expiration of specific licenses. Except as provided in 1200–2–10–.18(2), each specific license shall expire at the end of the day, in the month and year stated therein.

(2) Termination of specific licenses:

(a) Specific licenses shall continue in effect, beyond the expiration date if necessary, with respect to possession of radioactive material until the Division notifies the licensee in writing that the license is terminated. During this time, the licensee shall:

1. Limit actions involving radioactive material to those related to decommissioning; and

2. Continue to control entry to restricted areas until they are suitable for release in accordance with Division requirements.

(b) Specific licenses, including expired licenses, will be terminated by written notice to the licensee when the Division determines that:

1. The licensee has properly disposed of radioactive material;

2. The licensee has made reasonable effort to eliminate residual radioactive contamination, if present; and

3. The premises are suitable for release in accordance with Division requirements. The licensee may demonstrate suitability for release by:

(i) Performance of the radiation survey described in 1200–2–10–.17(4)(d)2, or

(ii) Submission of other information that the Division determines is acceptable;

4. The licensee has complied with any requests for information from the Division; and

5. The licensee has submitted a written request for license termination to the Division.

(3) Decommissioning of sites or separate buildings or outdoor areas:

(a) Each specific licensee shall notify the Division in writing, at the address in 1200–2–4–.07, within 60 days of any of the following occurrences:

1. The license has expired pursuant to 1200–2–10–.17(2); or

2. The licensee has decided to permanently cease principal activities, as defined in this rule:

(i) At the entire site, or

(ii) In any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with Division requirements; or

3. No principal activities under the license have been conducted for 24 months; or

4. No principal activities have been conducted for 24 months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with Division requirements.

(b) Each specific licensee:

1. If not required by 1200–2–10–.17(4)(g) to submit a decommissioning plan, shall begin decommissioning its site or any separate building or outdoor area that contains residual radioactivity within 60 days of any occurrence listed in 1200–2–10–.17(4)(a).

2. If required by 1200–2–10–.17(4)(g) to submit a decommissioning plan, shall:

(i) Submit a decommissioning plan within 12 months of notification of any occurrence listed in 1200–2–10–.17(4)(a), and

(ii) Begin decommissioning upon Division approval of that plan.

(c) Coincident with the notification required by 1200–2–10–.17(4)(a), the specific licensee shall maintain in effect all financial assurances that were established, pursuant to 1200–2–10–.12(4) in conjunction with a license issuance or renewal, or that are required by this rule.

1. The Division will determine if the licensee shall increase, or may decrease, the amount of the financial assurance to cover the detailed cost estimate for decommissioning established pursuant to 1200–2–10–.17(4)(i)5.

2. The licensee may with Division approval reduce the amount of the financial assurance as decommissioning proceeds and radiological contamination is reduced at the site.

(d) As the final steps in decommissioning, specific licensees shall:

1. Certify the disposition of all licensed material, including accumulated wastes; and

2. Demonstrate that the premises are suitable for release in accordance with Division requirements.

(i) The licensee shall:

(I) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey, or

(II) Submit other information that the Division determines is acceptable.

(ii) The licensee shall, as appropriate:

(I) Report levels of gamma radiation in units of microroentgens (millisieverts) per hour at 1 meter from surfaces, and

(II) Report levels of radioactivity, including alpha and beta, in units of:

I. Disintegrations per minute or microcuries (megabecquerels) per 100 square centimeters — removable and fixed — for surfaces,

II. Microcuries (megabecquerels) per milliliter for water, and

III. Picocuries (becquerels) per gram for solids such as soils or concrete, and

(III) Specify the survey instrument(s) used and certify that each instrument was properly calibrated and tested at the time of the survey.

(e) Except as provided in 1200–2–10–.17(4)(k)(3), specific licensees shall complete decommissioning of the site or separate building or outdoor area so that the site, building or outdoor area is suitable for release in accordance with Division requirements as soon as practicable but no later than 24 months following the initiation of decommissioning.

(f) Except as provided in 1200–2–10–.17(4)(k)(3), when decommissioning involves the entire site, the specific licensee shall request license termination as soon as practicable but no later than 24 months following the initiation of decommissioning.

(g) A specific licensee shall submit a decommissioning plan if:

1. Required to do so by license condition; or

2. The Division determines that the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the Division and that these procedures could increase potential health and safety impacts to workers or to the public. Some examples are procedures:

(i) That would involve techniques not applied routinely during cleanup or maintenance operations;

(ii) In which workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;

(iii) That could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(iv) That could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(h) Specific licensees shall not carry out procedures with potential health and safety impacts before Division approval of the decommissioning plan.

(i) The proposed decommissioning plan for the site or separate building or outdoor area shall include:

1. A description of the conditions of the site or separate building or outdoor area sufficient to evaluate the acceptability of the plan;

2. A description of planned decommissioning activities;

3. A description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning;

4. A description of the planned final radiation survey; and

5. A detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for financial assurance, and a plan for assuring the availability of adequate funds for completion of decommissioning.

6. For decommissioning plans calling for completion of decommissioning later than 24 months after plan approval, the plan shall include a justification for the delay based on the criteria in 1200–2–10–.17(4)(k)(3).

(j) The Division will approve the proposed decommissioning plan if the information in the plan demonstrates that the licensee:

1. Will complete decommissioning as soon as practicable; and

2. Will adequately protect the health and safety of workers and the public.

(k) Requests for extensions:

1. A licensee may request a delay in initiating decommissioning.

(i) The Division may grant this delay, if the Division determines that this delay is not detrimental to the public health and safety and is otherwise in the public interest.

(ii) The request for a delay shall be submitted no later than 30 days before notification pursuant to 1200–2–10–.17(4)(a).

(iii) The schedule for decommissioning set forth in 1200–2–10–.17(4)(b) shall not start until the Division has made a determination on the request.

2. A licensee may request an alternative schedule for the submittal of a decommissioning plan. The Division may approve the alternate schedule, if the Division determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the public health and safety and is otherwise in the public interest.

3. A licensee may request an alternative schedule for the completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate. The Division may approve the alternative schedule for completion of decommissioning, if the Division determines that it is warranted by consideration of the following:

(i) Whether it is technically feasible to complete decommissioning within the allotted 24–month period;

(ii) Whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24–month period;

(iii) Whether allowing short–lived radionuclides to decay will achieve a significant volume reduction in wastes requiring disposal;

(iv) Whether allowing short–lived radionuclides to decay will achieve a significant reduction in radiation exposure to workers;

(v) Other site–specific factors that the Division may determine are beyond the control of the licensee.

Authority: T.C.A. §68–202–101 et seq.

Paragraph (3) of Rule 1200-2-10-.22 Transfer of Material is amended by inserting the words " or report" after the word "register", so that as amended the paragraph shall read:

(3) Before transferring sources of radiation to a specific licensee of the Division, the U.S. Nuclear Regulatory Commission, an Agreement State or a Licensing State, or to a general licensee who is required to register or report with the U.S. Nuclear Regulatory Commission, an Agreement State or a Licensing State prior to receipt of the source of radiation, the transferor of the source of radiation shall verify that the transferee's authorization is for the receipt of the type, form, and quantity of the source of radiation to be transferred.

Authority: T.C.A. 68-202-101 et seq.

Other Information

Oral or written comments are invited at the hearing. In addition, written comments may be submitted to Barbara A. Davis at the Division of Radiological health, Central Office, address below, prior to or following the public hearing. However, the Division must receive comments in its Central Office by 4:30 p.m. (CST), May 9, 2004, in order to assure consideration

Copies of draft rules are available for review in the Public Access Areas of the following Departmental Environmental Assistance Centers:

Chattanooga Environmental Assistance Center
State Office Building

540 McCallie Avenue, Suite 550
Chattanooga, TN 37402-2013
(423) 634-5745 / 1-888-891-8332

Memphis Environmental Assistance Center
Perimeter Park
2510 Mt Moriah Road, Suite E-645
Memphis, TN 38115-1520
(901) 368-7939 / 1-888-891-8332

Knoxville Environmental Assistance Center
2700 Middlebrook Pike, Suite 220
Knoxville, TN 37921-5602
(865) 594-6035 / 1-888-891-8332

Nashville Environmental Assistance Center
711 R. S.Gass Boulevard
Nashville, TN 37243
(615) 687-7000 / 1-888-891-8332

Copies are available for review also at the Division of Radiological Health, Central Office:

Division of Radiological Health
L & C Annex, Third Floor
401 Church Street
Nashville, TN 37243-1532
(615) 532-0364

The "DRAFT" rules may be accessed for review also at the Department's World Wide Web Site located at http://www.tdec.net/rad .

Legal Contact:

Alan Leiserson
TDEC Office of General Counsel
L & C Annex, 20th Floor
401 Church Street
Nashville, TN 37243-0131

Party who will approve final copy / contact for disk acquisition:

Barbara A. Davis
TDEC Division of Radiological Health
L & C Annex, 3rd Floor
401 Church Street
Nashville, TN 37243-1532

I certify that this is an accurate and complete representation of the intent and scope of rulemaking proposed by the Tennessee Department of Environment and Conservation.

_____
Lawrence E. Nanney, Director
Division of Radiological Health

Subscribed and sworn before me this the _____ day of _____, 2004.

_____
Notary Public

My commission expires on the _____ day of _____, 20____.

The notice of rulemaking hearing set out herein was properly filed in the Department of State on the _____ day of _____, 2004.

____

Riley C. Darnell
Secretary of State

By ____